



Let's Talk About a Stroke Diagnosis

How is a stroke diagnosed?

It's critical to diagnose a stroke in progress because the treatment for stroke depends on the type, source, and in some cases, the location of the injury to the brain.

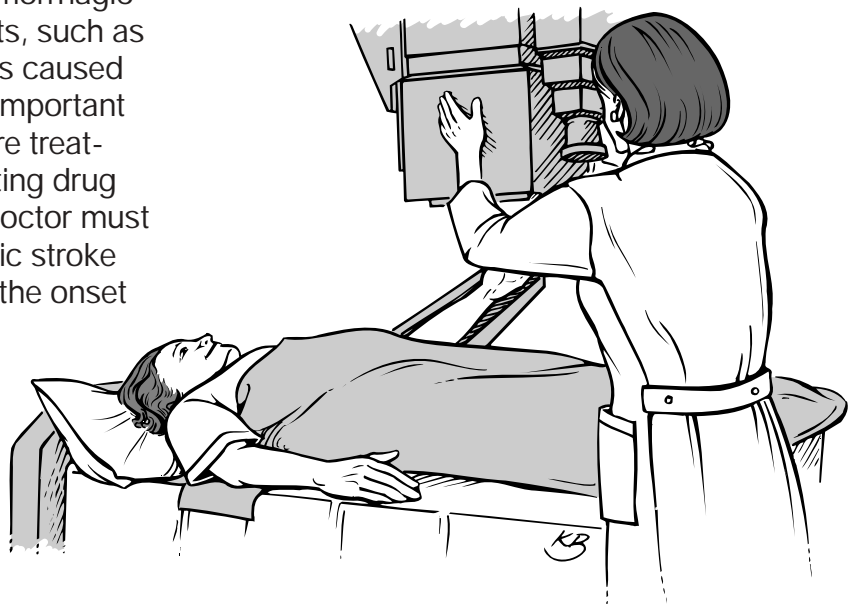
Other conditions with similar symptoms to stroke and TIA will need to be ruled out to diagnose stroke. Some of these include seizures, fainting, migraine, heart problems or other general medical conditions.

The type of stroke also must be determined. Treatment for stroke is different if it's an ischemic stroke or a hemorrhagic stroke. A blocked artery causes an ischemic stroke. A ruptured blood vessel causes a hemorrhagic stroke. Clot-busting drug treatments, such as tPA, are appropriate only for strokes caused by a blocked artery. Therefore, it's important to receive a correct diagnosis before treatment begins. To receive a clot-busting drug treatment such as tPA, a medical doctor must diagnose your stroke as an ischemic stroke and treat you within three hours of the onset of symptoms.

***Timing is very important!
Time lost is brain lost.***

In the emergency room, your doctor or stroke emergency team will do the following to make a correct diagnosis:

- Ask you about your medical history.
- Conduct a physical and neurological examination.
- Have certain laboratory (blood) tests done.
- May do a CT (computed tomography) scan of the brain or MRI (magnetic resonance imaging) brain scan.
- Study the results of other diagnostic tests that might be needed.



What are the types of diagnostic tests?

A doctor may use many different tests. Diagnostic tests examine how the brain looks, works and gets its blood supply. Most are safe and painless. Diagnostic tests fall into two categories: 1) imaging tests and 2) blood flow tests.

Imaging Tests

- **CT scan** (Computed Tomography) or **CAT scan** is a key imaging test of the brain. It uses radiation to create a picture of the brain. It's usually one of the first tests given to a patient with stroke symptoms. CT test

results give valuable information about the cause of stroke and the location and extent of brain injury.

- **MRI** (Magnetic Resonance Imaging) uses a large magnetic field to produce an image of the brain. Like the CT scan, it shows the location and extent of brain injury. The image produced by MRI is sharper and more detailed than a CT scan so it's often used to diagnose small, deep injuries.

Blood Flow Tests

These tests give detailed information about

the condition of arteries in your head and neck that supply blood to your brain. Another test is a medical procedure called angiography, otherwise known as arteriography. In this test, special substances are injected into the blood vessels and an X-ray is taken. Angiography gives a picture of the blood flow through the vessels. This allows the size and location of blockages to be evaluated. This test is especially valuable in diagnosing aneurysms and malformed blood vessels and providing valuable information before surgery.






How can I learn more?

- Talk to your doctor, nurse or other healthcare professionals. Ask about other stroke topics. This is one of many *Let's Talk About Stroke* fact sheets available.
- For more information on stroke, or to receive additional fact sheets, call the American Stroke Association at 1-888-4-STROKE (1-888-478-7653) or visit us online at StrokeAssociation.org.
- If you or someone you know has had a stroke, call the American

Stroke Association's "Warmline" at 1-888-4-STROKE (1-888-478-7653), and:

- ✓ Speak with other stroke survivors and caregivers, trained to answer your questions and offer support
- ✓ Get information on stroke support groups in your area
- ✓ Sign up to get *Stroke Connection Magazine*, a free publication for stroke survivors and caregivers

What are the Warning Signs of Stroke?

-  **Sudden weakness or numbness of the face, arm or leg, especially on one side of the body**
-  **Sudden confusion, trouble speaking or understanding**
-  **Sudden trouble seeing in one or both eyes**
-  **Sudden trouble walking, dizziness, loss of balance or coordination**
-  **Sudden, severe headaches with no known cause**



Learn to recognize a stroke.
Because time lost is brain lost.

Today there are treatments that can reduce the risk of damage from the most common type of stroke, but only if you get help quickly – within 3 hours of your first symptoms.

Call 9-1-1 immediately if you experience these warning signs!

Do you have questions for your doctor or nurse?

Take a few minutes to write your own questions for the next time you see your healthcare provider:

Do these tests cause any complications?

The statistics in this kit were up to date at publication. For the latest statistics, see the *Heart Disease and Stroke Statistics Update* at americanheart.org/statistics.

The American Stroke Association is a division of the American Heart Association. Your contributions will support research and educational programs that help reduce disability and death from stroke.

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